(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 11 November 2004 (11.11.2004)

PCT

(10) International Publication Number WO 2004/096982 A2

(51) International Patent Classification7:

C12N

(21) International Application Number:

PCT/US2003/035201

(22) International Filing Date:

4 November 2003 (04.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/423,858

5 November 2002 (05.11.2002) US

- (71) Applicant (for all designated States except US):
 SMITHKLINE BEECHAM CORPORATION
 [US/US]; One Franklin Plaza, P.O. Box 7929, Philadelphia, PA 19101 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): AXTEN, Jeffrey, Michael [US/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). MILLER, William, Henry [US/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). SEEFELD, Mark, Antony [US/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US).

(74) Agents: MADDEN, Laura, K. et al.; SMITHKLINE BEECHAM CORPORATION, Corporate Intellectual Proterty, UW2220, 709 Swedeland Road, P.O. Box 1539, King of Prussia, PA 19406-0939 (US).

- (81) Designated States (national): AE, AG, AL, AU, BA, BB, BR, BZ, CA, CN, CO, CR, CU, DM, DZ, EC, EG, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, OM, PH, PL, RO, SC, SG, TN, TT, UA, US, UZ, VN, YU, ZA.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIBACTERIAL AGENTS

(57) Abstract: Quinoline and naphthyridine derivatives useful in the treatment of bacterial infections in mammals, particularly